

CLAIMS:

1. A golf ball with mechanically interlocked components comprising:
a core;
a cover layer disposed about the core;
wherein the core has small voids in the surface; and
the cover layer fills the voids in the core surface, thereby mechanically interlocking the core and the cover.
2. The golf ball of claim 1, wherein the voids are formed by particulate material that is molded into the core surface and then subsequently removed by flushing or washing of the core with a solvent.
3. The golf ball of claim 2, wherein the particulate material is crystalline or amorphous in shape.
4. The golf ball of claim 2, wherein the solvent is aqueous.
5. The golf ball of claim 2, wherein the solvent is non-aqueous.
6. The golf ball of claim 5, wherein the solvent is selected is an organic solvent.
7. The golf ball of claim 2, wherein the particulate material has a mesh U.S. standard size of from about 5 to about 400 mesh.
8. The golf ball of claim 7, wherein the particulate material has a mesh U.S. standard size of from about 20 to about 60 mesh.

9. The golf ball of claim 2, wherein the particulate material is selected from the group consisting of salts, sugars, agar, gelatin, polyvinyl alcohol, thermoplastic particulate materials, and combinations thereof.

10. The golf ball of claim 1, wherein the cover comprises at least an inner and an outer cover layer.

11. The golf ball of claim 1, wherein the voids are formed by hollow microspheres that are molded into the core surface and then subsequently ground down to expose voids in the surface of the core.

12. The golf ball of claim 11, wherein the hollow microspheres are selected from ceramics, glass, phenolics, thermoplastics and combinations thereof.

13. The golf ball of claim 1, wherein at least some of the voids in the core comprise undercuts.

14. A golf ball with mechanically interlocked components comprising:
a core;
a core layer disposed about the core;
a cover layer disposed about the core layer;
wherein the core layer has small voids in the surface; and
the cover layer fills the voids in the core layer surface, thereby mechanically interlocking the core layer and the cover.

15. The golf ball of claim 14, wherein the voids are formed by particulate material that is molded into the core surface and then subsequently removed by flushing or washing of the core with a solvent.

16. The golf ball of claim 15, wherein the solvent is aqueous.

17. The golf ball of claim 15, wherein the solvent is non-aqueous.
18. The golf ball of claim 15, wherein the particulate material is crystalline or amorphous in shape.
19. The golf ball of claim 14, wherein at least some of the voids in the core comprise undercuts.
20. The golf ball of claim 14, wherein the voids are formed by hollow microspheres that are molded into the core surface and then subsequently ground down to expose voids in the surface of the core.
21. A golf ball comprising:
a core; and
a cover layer disposed about the core layer,
wherein the core has depressions formed on the surface of the core, and
wherein the cover layer fills the depressions on the surface of the core, thereby mechanically interlocking the core and the cover.
22. The golf ball of claim 21, wherein the depressions are formed by a fabric molded onto the core surface that is subsequently dissolved in a solvent and removed, thereby leaving the depressions on the core surface.
23. The golf ball of claim 22, wherein the fabric comprises fibers woven into a fabric.
24. The golf ball of claim 23, wherein the fibers comprise polyvinyl alcohol.